

29. (New) The process of claim 26 in which the cytokinin is 2iP.
30. (New) The process of claim 26 in which the somatic embryo production medium of step (c) is a phytohormone-free medium.
31. (New) The process of claim 26 in which said tissue is taken from seedlings.
32. (New) The process of claim 31 in which said tissue comprises cotyledon tissue.
33. (New) The process of claim 31 in which said tissue comprises hypocotyl tissue.
34. (New) The process of claim 26 in which said tissue is taken from immature embryos.
35. (New) The process of claim 26 in which the embryo maturation medium of step (c) contains no phytohormones.
36. (New) The process of claim 26 in which the embryo maturation medium of step (c) contains zeatin, NAA and a gibberellin.
37. (New) The process of claim 26 in which the embryo germination medium of step (c) comprises GRM_{gm}.
38. (New) The process of claim 26 in which the plant regeneration medium of step (c) comprises \square G₀.
39. (New) The process of claim 26 in which the plant regeneration medium of step (c) comprises GRM_{2n}.
40. (New) The process of claim 26 in which said tissue is transformed to contain selected foreign DNA.

41. (New) The process of claim 40 in which said tissue is transformed by contacting it with *Agrobacterium* containing said foreign DNA.

42. (New) The process of claim 40 in which a whole plant containing foreign DNA is regenerated.

43. (New) The process of claim 40 in which said plant expresses said foreign DNA.

44. (New) A plant produced by the method of claim 41 having a phenotype conferred by said foreign DNA by which said plant can be distinguished from a naturally-occurring plant.

45. (New) A seed of a plant of claim 44.

46. (New) In a method for regenerating a cotton (*Gossypium*) plant comprising culturing somatic tissue thereof on suitable media to cause callus formation and whole plant regeneration, the improvement comprising using somatic tissue of a Class 2 genotype of a *Gossypium* species and culturing on a callus initiation medium having a high cytokinin/auxin ratio followed by culturing on an embryo induction medium having a high auxin/cytokinin ratio.